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THE IMPROVEMENT OF THE MISSOURI RIVER AND ITS USEFULNESS AS A TRAFFIC ROUTE

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By all fair reasoning the Missouri is the greatest river on the American continent. From the three forks of the Missouri northwest of Yellowstone Park to its mouth, as the stream meanders, is a distance of 2,547 miles, and to the Gulf of Mexico, the Missouri-Mississippi has a length of 3,823 miles. The Missouri is longer than the entire Mississippi, and more than twice as long as that part of the Mississippi above their confluence. The Missouri drains a watershed of 580,000 square miles, or one-sixth of the land surface of the United States, and its mean total annual discharge is estimated to be twenty cubic miles, or at a rate of 94,000 cubic feet per second, which is more than twice the water discharged by the upper Mississippi. The Missouri is by far the bolder, the more rapid and more turbulent of the two streams.

It is the most feasible waterway project in the United States to-day. The results to be realized by its improvement are more far-reaching for the amount of money to be expended than can be secured from any other project. The Missouri has the greatest navigable length of any river in the United States; it has a greater and more continuous volume of water than any other river in the United States; it has more and better stretches of "good river" than any other. It is the only interior river having water enough of its own to sustain a minimum channel of twelve feet.

With a twelve-foot channel the Missouri would have a freight-carrying capacity equal to 600 single-track railroads, and yet the improvement would cost less than to build one single-track railroad from Kansas City to St. Louis. A competent authority has calculated that with a twelve-foot channel, the Missouri would save the West every year an amount that would more than equal the entire cost of improvement from its mouth to Kansas City. Its improvement as planned would solve two great problems for the West: high and unfair rates and inability of the railroads to handle

the traffic on the present tracks. The greatest problem in railroad transportation to-day, aside from that of exorbitant and unequal freight rates, is to secure tracks upon which to move cars. New tracks to relieve the congestion cannot be built. There is neither money, material, nor men for the work. When we realize this, then we can see the urgent necessity for improving the great natural highways of commerce flowing past our doors.

The History of Steamboating on the Missouri

When the steamboat and the prairie schooner were the only means of transportation to the promised land of the great West; when the gold hunter, the trapper and the adventurer were the pioneers of civilization, hundreds of boats plied the waters of the Missouri, going as far north as Fort Benton, twenty-five hundred miles from St. Louis. Fortunes were made by a boat in a single trip. Steamboating reached the summit of its prosperity about the time of the breaking out of the Civil War. More than 700 boats navigated the Missouri in those days, and more than 200 now lie buried in the sands between Kansas City and St. Louis—silent reminders of the glory of other days.

The first steamboat—the Independence—ascended the Missouri River as far as the mouth of the Chariton River in the spring of 1819. However, there were few steamboats on the river previous to 1840, owing to the limited demands of commerce. For many years the navigation of the Missouri River was confined to primitive wooden craft, and its commerce was restricted to the fur trade; but as soon as it was known that the Missouri was such a navigable river, and that it flowed through such a rich agricultural region, the navigation on the river increased until the year 1858, when it reached its maximum.

In 1858 packet lines were established from the mouth of the Missouri to Miami, Kansas City, St. Joseph, Omaha and even to Sioux City. Those lines carried United States mail and express freight. So numerous were the boats on the river during this period that it was no unusual sight to see five or six lying at the landing at the same time, and at no time was a boat out of sight during the boating season, which continued from March to November. The prosperity that this great traffic brought to the river towns was phenomenal and the population of many of them was

larger fifty years ago than to-day. In 1857, fifty years ago, the wharfmaster at Kansas City reported more than 700 steamboats at the Kansas City Levee. The levee, then and for many years, was the busiest part of the business district, but the Civil War, following close upon this great prosperity of the Missouri River caused the loss of many of the boats and drove others from the river.

In 1862 gold was discovered in Montana, in consequence of which there was a great rush to that country. The Missouri River was the only means of transportation and of course this caused a wonderful revival of steamboating. This was of but short duration, but it proved to be exceedingly profitable, as the rates demanded and paid were exorbitant. The voyage to Fort Benton was 2,200 miles and this was beset with danger, both in the navigation and from the Indians. The usual rate charged on freight was from ten to fifteen cents per pound and a first-class passage to Fort Benton cost \$300.00. The railroads which were then rapidly expanding and pushing into the new territory soon came into such competition with the steamboats that they forced them out of business, by carrying freight cheaper than the steamboats did. However, as commerce began to leave the river, railroad rates began to advance, until Kansas City business men felt the necessity of seeking relief by restoring river competition.

In February, 1890, a company was incorporated under the laws of the State of Missouri, with an authorized paid-up capital of \$132,500. This company was known as the Kansas City and Missouri River Transportation Company. They built four wooden boats and operated them more or less regularly for four years. Much has been said about the failure of this packet line, but, as a matter of fact, it did more to regulate freight rates between the Mississippi and the Missouri than anything else that had been done before or since. It saved the shipper \$100 for every \$5.00 he had in it; it established the fact that water competition existed in Kansas City and the railroads had to meet it. The old packet line of 1890 was not a failure; it was a grand success, and Kansas City made millions of dollars out of it. The railroads started in deliberately to put this packet line out of business, and by rebates and other unfair methods succeeded in doing so. In fact, the whole fabric of rates went to pieces, and as the Kansas City and Missouri

River Transportation Company was not properly supported by the merchants, it was forced to quit business. From the time the Kansas City and Missouri River Transportation Company discontinued business until late in the summer of 1906, there were no efforts made to navigate the Missouri River.

The Missouri River Valley Improvement Association was formed July 30, 1906, at a meeting held in Kansas City, attended by representatives of the principal commercial bodies of Kansas City, Missouri, and Kansas City, Kansas. The records of the first year's work speaks for itself. Its purposes were:

To prove the Missouri River navigable.

To have the river navigated by commercial freight carriers.

To secure from Congress appropriation for improvement of the channel in aid of navigation.

To establish and maintain a close working relationship with the National Rivers and Harbors Congress and other organizations promoting river improvement.

To conduct a campaign of education intended to inform the people of the Missouri Valley and trans-Missouri region, the officials in Washington and the Congress of the United States, of the magnificent possibilities and tremendous commercial importance of Missouri River improvement.

The doubt as to the navigability of the Missouri River by steamboats carrying sufficient freight to render operation profitable which existed when this association began its work, has been entirely removed. The impression seemed to have become general, even in commercial centers of the Missouri Valley, among the officials in Washington and with the members of the Rivers and Harbors Committee, that the Missouri River had passed its days of usefulness as a commercial highway. There is a different impression now.

There are signs of a great awakening of interest in the navigation of the Missouri River and why should there not be, when Kansas City is paying to-day as high freight rates as she did thirty years ago? There is no relief under the law, and the only redress from the grasp of this relentless power, is that furnished by this great highway of commerce, the Missouri River.

Re-establishment of Regular Navigation

One year ago Kansas City decided to begin navigating the Missouri. She did not bombard Congress for an appropriation for the river, but went to work to demonstrate that the thing was feasible. If it was not feasible, we did not want any money from the government; if it was feasible, we were satisfied that, when we had demonstrated that fact, the government would do its part, and we have not been disappointed in our calculations. We believed that, with the use of the river would come governmental co-operation and that we should first show our faith by our works before asking the government for any expenditure of money. We are firmly convinced that use and improvement should go hand in hand. Here was a great river flowing past our doors. Here was the solution of our transportation troubles. In this river dwelt the power that was to free the young metropolis and the great West. The river was the same river as when hundreds of craft plowed its waters. Why not use it now?

One year ago Kansas City procured boats for experimental trips from St. Louis to Kansas City. The experiments were successful. The boats made the trip from St. Louis to Kansas City loaded with freight, without ever turning a wheel backward, and this year regular freight and passenger service has been inaugurated. The successful experiments in navigating the Missouri in the summer and fall of 1906 and the promise of Kansas City to use the river more extensively than ever, enabled our member of Congress, Hon. E. C. Ellis, to get an ample appropriation of funds to start the snag boats to remove obstructions and to have shore lights placed. Two boats, the "General Suter" and the "James B. McPherson," are now industriously engaged in cleaning the channel of snags and other obstructions accumulated during years of governmental neglect. This appropriation was the first that has been made in aid of the navigation of the Missouri for several years. Thus the Missouri was restored "to the map" of navigable streams, entitled to federal aid. In addition to this appropriation, provision was made for a report by engineers, upon which report appropriations may be based for the improvement of the Missouri River in the future.

The next step taken was the organization of the Kansas City Transportation and Steamship Company, the purpose of which

organization was to maintain regular steamboat service between Kansas City and St. Louis. This company put into operation, with the opening of navigation this spring, a line of boats which have made regular trips between Kansas City and St. Louis. The people are now awake to the great things in store for the West through the resumption of navigation on the Missouri. It promises to usher in an era of large development.

With imperfect equipment, we are able to carry freight between St. Louis and Kansas City at an average reduction of one-third from railroad rates. When we get our splendid non-sinkable steel boats, for which we are now letting contracts, we confidently believe we can carry freight for one-half the railroad rates and realize good returns on the investment. We have demonstrated in one year that we have a river, that we have the money to build boats, and that we have the freight for the boats to carry. The old Missouri is once more ready to fulfil its destiny as one of the great commercial highways of the West.

Advantages to Accrue from Improvement of the Missouri River

The best way to arouse sentiment in favor of an improvement is to show the benefits sure to accrue from it. For example, by using the proposed twelve-foot channel of the Missouri, the fourteen-foot waterway via the Illinois River and the Chicago Canal, the Great Lakes, and the twelve-foot Erie Canal, at the average freight rates of water routes as compared with rail, one congressional district of the State of Kansas would have received for its 1906 wheat crop over \$5,000,000 more than at the prices paid.

It would not have been necessary that one bushel of this wheat should actually move to New York at this rate. The fact that it *could* would make the price for the entire crop, not only of the district but of the state and adjoining states. Wheat is sold on the world's markets, and the price of wheat in Kansas or Nebraska is practically that of Liverpool, less the cost of transportation. Reducing the rate raises the price, regardless of the ultimate disposition or destination of the product.

To bring the illustrations of the gains in this district a little closer home, it may be said that one county, Sumner, would have gained in 1906 \$500,000, or a per capita of \$20 for not only the families of the farmers, but for the residents of the cities and towns

as well. Other counties of the same district would have gained per capita from \$20 to \$40.

It may be difficult to realize just what this would mean to the farmers' families, to the tradesmen of the towns, and to the jobbers and manufacturers of the cities of the whole trans-Mississippi wheat-growing region. It would mean even more because of the lower west-bound freight rates on the products sold to the enriched consumers, adding this large saving to his other big profits. There is to be considered also the enhanced price of other farm products as a result of reduced rates to their best markets. With this also would go a big advance in prices for farm lands, so that the farmer in Kansas to-day may find himself made rich by the improvement of the Missouri River.

The gain in the value of farm lands in the states of Nebraska, Kansas and Oklahoma, accruing from improvement of the Missouri, would pay the cost several times over. The benefits afforded would continue year after year, while the cost of maintenance, once the channel is permanently established, would be insignificant in comparison with either its first cost or its savings to shippers.

Kansas City might have saved several million dollars on its 1906 shipments with an improved channel in the Missouri. This would have been increased largely if the Missouri was used in connection with the Illinois and Erie Canals and the Great Lakes to make a direct waterway to New York, and by the improvement of the Mississippi, to afford a deep water route to the Gulf of Mexico.

The gain to Kansas City, Omaha, and other Missouri River cities would be still further augmented by the great increase of business—in manufacturing, jobbing and other lines—as a result of the low rates and the exceptional prosperity that must come to Nebraska, Kansas, Oklahoma and other Western States by the gain in price of their products.

These two examples—that of the Seventh Kansas Congressional district and that of Kansas City—have been selected from among many, all making the same general showing. What is true of the Kansas counties named is true, in greater or less degree, of the whole State and other Western States as well; and the same can be said of Kansas City and other commercial centers on the Missouri River.

If the producer cannot find means to transport his commodities to a market where they are needed, he is forced to cease or cut down production in his particular line. This means a curtailment of his power to purchase the products of others, which of course has a depressing effect on labor, brings about contraction in financial affairs and recession in business generally. Production is growing five times as fast as railroad mileage, and the railroads of this country are absolutely unable to catch up with the demands of transportation. This will necessitate our reducing our activities in production with the far-reaching effect this would have on labor and capital.

A car shortage would be unheard of if we made proper use of the inland waterways of our country. They would furnish a cheap and reliable means of transportation, not conflicting with the railroads, but assisting them in removing the greatest obstacle to commercial and industrial progress—insufficient transportation facilities. The Missouri River, improved according to the recommendations of governmental engineers, would have a freight-carrying capacity equal to that of 600 railways, fifty times the capacity of all the roads running between the Mississippi River and the lower Missouri and more than twenty-five times the capacity of all the railroads running from the Mississippi to the Missouri at all points.

The economy of operation of transportation lines on the improved Missouri would be such that boats could make large profits in carrying freight at greatly reduced rates between the rivers. Owing to the bend in the Missouri at Kansas City, that city is practically the point farthest west for inland navigation. Accordingly, when the improvement of the Missouri is completed to Kansas City, 390 miles, freight rates will be affected to the entire trans-Missouri Valley.

This territory that pays the same freight rate as Kansas City on traffic moving between the Mississippi and the Missouri constitutes one-fourth of the area of the United States, exclusive of Alaska. One-eighth of the population of the United States lives within its borders. Removed from markets, the people naturally have to pay high freight rates on all they produce and consume. No other section is more in need of or more entitled to the relief that can be furnished only by the improvement of the Missouri River.

These people have no other river project. The rates east of the Mississippi have never been as exorbitant as west. First class, from Chicago to the Mississippi, the rate is 20 cents; Mississippi to Kansas City is 60 cents. At one time the published tariffs from the Mississippi River to Kansas City were on a basis of 30 cents, first class.

The Missouri River constitutes 5 per cent of the entire navigable inland waterways of the United States, including the Great Lakes. It has 14 per cent of the navigable waterway of the region drained by the Mississippi. Its navigable length is greater than the distance by rail from St. Louis to San Francisco. It has a navigable bed above Sioux City of 1,475 miles, or 500 miles more than the entire length of the Ohio. It is the one interior river, except the lower Mississippi, which it feeds, that has a water supply sufficient to make every city along its course for 800 miles a seaport. The territory affected paid, in 1905, 15 per cent of the freight revenue of the United States, or \$220,000,000, of which a large part would have been saved to producers and consumers if the Missouri River had been improved.

Cost of Improvement

The cost of improving the Missouri River, from its mouth to Kansas City would be less than that of paralleling the Wabash Railroad, the short line between Kansas City and St. Louis. Government engineers estimate the Missouri River can be given a permanent twelve-foot channel from its mouth to Sioux City at a cost of \$40,000,000. The Lakes-to-the-Gulf deep waterway project calls for a fourteen-foot channel, and this minimum depth could easily be obtained in the Missouri below Kansas City with small additional cost. The engineers' estimate of the cost of the work is for \$20,000,000 below and \$20,000,000 above Kansas City.

The Missouri River is destined to form an important part in the comprehensive system of deep waterways building in the United States. The Erie Canal is being deepened from seven to twelve feet at a cost of \$101,000,000 appropriated by the legislature of New York. The Chicago Drainage and Ship Canal has been extended to the valley of the Illinois River, the canalization of which stream would give a fourteen-foot channel from the Great Lakes to the Mississippi. These two waterways, in connection with the

Great Lakes, would open up a water route from the Missouri to New York.

The amount asked for the Missouri is not large in comparison with the cost of improving other streams. The Ohio River, on which many millions have been spent, must have \$61,000,000 more to give it a nine-foot channel. The Mississippi needs more money than the Ohio, so that the Missouri is making a modest demand. Draining the granary of the country, with a vast tributary region paying high rates to the railroads, and demanding the relief river navigation would afford, the right of the Missouri cannot be ignored.

Plans of Missouri River Improvement

Two plans for the continuous, systematic improvement of the Missouri River have had official approval—that favored by the Missouri River Commission and that under which work was carried on in the early 90's. The report of the Missouri River commission says:

In order to obtain a depth of twelve feet at low water, wide enough for navigation, a result that can be regarded as perfectly practicable, suppose it were necessary to spend as much as \$50,000 per mile, which recent experiments almost conclusively show to be a liberal estimate, the cost of obtaining this channel, up as far as Kansas City, would be less than \$20,000,000. An amount, as before shown, saved to the producers of the valley in one year.

To carry this same improvement to Sioux City would cost only about \$40,000,000—saved to the producers in two years.

To improve the river, even between Kansas City and St. Louis, to a low water depth of twelve feet is deemed perfectly practicable, and at a cost per mile of \$50,000, not exceeding that of a first-class railroad.

This would give us a highway free to all having a carrying capacity of 600 single track railroads.

Congress made appropriations in 1892 for the systematic improvement of the Missouri River in aid of navigation, but the plan provided for a depth of six instead of twelve feet. Appropriations for this work were discontinued after 1896, and not renewed.

Appropriations for Waterways an Investment, Not an Expense.*

It is estimated that the internal trade of the United States aggregates more than twenty-five billions of dollars annually. Appropriations of fifty millions annually for waterways would be but a fraction of one per cent of this great business. As commerce bears the great bulk of the expenses of the government, it seems but fair that a liberal part of governmental appropriations should be directed toward the upbuilding of commerce. In the race for commercial supremacy, we must of necessity equip ourselves with all the facilities necessary to hold our place in the commercial world. If, by the expenditure of fifty millions annually on our waterways, we could save our citizens hundreds of millions in transportation charges, to say nothing of the great impulse it would give to all our industries, it would not be a waste of money, it would not be an expense, but a magnificent *investment*.

There is a close relation between the improvement of our rivers and the building of the Panama Canal. If the United States is to realize what it should from this great undertaking, it is absolutely necessary to improve the waterways of this country. If we do not do so, we are practically building that great canal for the use of foreign nations. The improvement of our internal waterways will enable us to compete with foreign nations for the trade of that great country south of us, where we make such a poor showing to-day. With improved waterways and the Panama Canal, we are in touch with the rich trade of the Orient, the prize of commerce for thousands of years. The last fifty years have been the most wonderful in achievement in the history of the world. Those fifty years cover the life of Kansas City and the great West. The achievement of those brief years is but an earnest of what may be accomplished in the future. The West asks that it may be allowed to use the great resources with which it has been endowed by nature.